



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,542	01/12/2006	Erich Klein	ATO30039	1871
65913	7590	07/22/2008		
NXP, B.V. NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131			EXAMINER ROBINSON, RYAN C	
			ART UNIT 2615	PAPER NUMBER
			NOTIFICATION DATE 07/22/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary

Application No.

10/564,542

Applicant(s)

KLEIN, ERICH

Examiner

RYAN C. ROBINSON

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 1/12/2006

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-13 are pending in the current application.
2. This application is a national stage of PCT/IB2004/051215, filed on 7/14/2004, which claims foreign priority from EPO application number 03102153.8, filed on 7/15/2003.

Claim Objections

3. Claim 1 is objected to because of the following informalities: Lines 7-8 read "does not also comprise". Examiner suggests that "does not also comprise" be changed to "does not comprise". Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 5, and 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Hawker et al., US Patent No. 6,002,949, published on 12/14/1999, (hereby Hawker).

6. As to claim 1, Hawker teaches a communication device (10) that comprises a loudspeaker (20) for generating sound and that is designed to deliver the sound generated by the loudspeaker (20), in an against-the-ear mode, into a space bounded by an ear and, in an away-from-the-ear mode, into an acoustic free space, and that comprises holding means (12), which holding means (12) comprise a first holding-means region (38) via which, in the against-the-ear mode, the sound generated by the loudspeaker (20) can be delivered without being blocked by the ear and which holding means (12) comprise a second holding-means region (36) that does not comprise the first holding-means region (38) and via which the sound generated by the loudspeaker (20) can be fed in the against-the-ear mode to the space bounded by the ear, and that comprises first sound-conveying means (32, 48) by which aid the sound generated by the loudspeaker (20) can be conveyed, in the away-from-the-ear mode through the first holding-means region (38) into the acoustic free space, and that comprises second sound-conveying means (40) by which the sound generated by the loudspeaker (3) can be conveyed, in the against-the-ear mode, through the second holding-means region (36) into the space bounded by the ear.

7. As to claim 2, Hawker teaches a communication device (10), wherein the communication device (10) comprises in its interior a sound-collecting chamber (30) that can be directly exposed to sound with the aid of the loudspeaker (20) and wherein the first sound-conveying means (32, 48) comprises a sound-delivery chamber (32)

Art Unit: 2615

designed as open at least to the first holding-means region (38), and a coupling duct (42), which coupling duct (42) opens at its one end into the sound-collecting chamber (30) and at its other end into the sound-delivery chamber (32).

8. As to claim 5, Hawker teaches a communication device (10), wherein the sound-delivery chamber (32) is covered in the region in which it is designed as open to the first holding-means region (38) by a cover (56) that has an acoustic friction.

9. As to claim 12, Hawker teaches a communication device (10), wherein a module (26) is provided, wherein the module (26) comprises the loudspeaker (20) and the holding means (34) for the loudspeaker (20), and wherein the module (26) comprises the first sound-conveying means (32, 48) and the second sound-conveying means (30, 40).

10. As to claim 13, Hawker teaches a module (26) for a communication device (10), wherein the module (26) comprises the loudspeaker (20) and the holding means (34) for the loudspeaker (20), and wherein the module (26) comprises the first sound-conveying means (32, 48) and the second sound-conveying means (30, 40).

11. Claims 1, 9-10, and 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Clark, US Patent No. 6,134,336, published on 10/17/2000, (hereby Clark).

12. As to claim 1, Clark teaches a communication device (100) that comprises a loudspeaker (402) for generating sound and that is designed to deliver the sound generated by the loudspeaker (402), in an against-the-ear mode, into a space bounded by an ear and, in an away-from-the-ear mode, into an acoustic free space, and that comprises holding means (102), which holding means (102) comprise a first holding-means region (112) via which, in the against-the-ear mode, the sound generated by the loudspeaker (400) can be delivered without being blocked by the ear and which holding means (102) comprise a second holding-means region (113) that does not comprise the first holding-means region (112) and via which the sound generated by the loudspeaker (402) can be fed in the against-the-ear mode to the space bounded by the ear, and that comprises first sound-conveying means (506, 508) by which aid the sound generated by the loudspeaker (402) can be conveyed, in the away-from-the-ear mode through the first holding-means region (113) into the acoustic free space, and that comprises second sound-conveying means (124) by which the sound generated by the loudspeaker (402) can be conveyed, in the against-the-ear mode, through the second holding-means region (112) into the space bounded by the ear.

13. As to claim 9, Clark teaches a communication device (100), wherein sound-deflection means (502, 504) are provided that are disposed at least partly inside the second holding-means region (112) and that are designed to deflect the sound delivered through the second holding-means region (112) into the space bounded by an ear, from said space into the acoustic free space (Col. 5, lines 55-56).

14. As to claim 10, Clark teaches that the sound deflection means (502, 504) have a sound deflection chamber (502, 504) that is open at least to the first holding means region (112), and a deflection duct (112, 128), which deflection duct opens at its one end into the sound-deflection chamber (502, 504), and at its other end into a space bounded by the ear.

15. As to claim 12, Clark teaches that the communication device (100) has a module (102) provided, which is the upper part of the communication device (Col. 5, lines 58-59), wherein the module (102) comprises the loudspeaker (400) and the holding means (102) for the loudspeaker (400), and wherein the module (102) comprises the first sound-conveying means (506, 508) and the second sound-conveying means (124).

16. As to claim 13, Clark teaches a module (102) for a communications device, which is the upper part of the communication device (Col. 5, lines 58-59), wherein the module (102) comprises the loudspeaker (400) and the holding means (102) for the

loudspeaker (400), and wherein the module (102) comprises the first sound-conveying means (506, 508) and the second sound-conveying means (124).

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 3-4, and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hawker et al., US Patent No. 6,002,949, published on 12/14/1999, (hereby Hawker) as applied to claims 1-2 above.

19. As to claim 3, Hawker teaches a communication device (10), wherein the coupling duct (42) has an essentially rectangular flow cross-section. It is noted, however, that Hawker may not explicitly disclose a flow cross-section having a width in a range from 5 mm to 8 mm and a height in a range from 0.3 mm to 0.7 mm as claimed. However, it would have been obvious to one of ordinary skill in the art to select a design choice of a suitable range for the duct dimensions.

Art Unit: 2615

20. As to claim 4, Hawker teaches a communication device (10). It is noted, however, that Hawker may not explicitly disclose a that the sound delivery chamber has a volume in a range from 0.01 ccm to 0.4 ccm as claimed. However, it would have been obvious to one of ordinary skill in the art to select a design choice of a suitable range for the sound delivery chamber volume.

21. As to claim 6, Hawker teaches a communication device (10), wherein the second sound-conveying means (40) are formed with the aid of at least one passage through a boundary wall (36) of the sound-delivery chamber (40). In regards to the second sound-conveying means, one of ordinary skill in the art would recognize that the chamber (30) acts as both a sound collection chamber, as it is acoustically connected to speaker (20), and as a sound delivery chamber, because it is acoustically connected to sound outlets (40).

22. As to claim 8, Hawker teaches that the passage (40) is covered along the inside of the sound-delivery chamber (30) with a cover that has acoustic friction (54).

23. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clark, US Patent No. 6,134,336, published on 10/17/2000, (hereby Clark).

24. As to claim 11, Clark does not expressly disclose that a cover that covers the cross section of the deflection duct and that has an acoustic friction is provided in the region of the opening of the deflection duct into the sound-deflection chamber. However covers for acoustic apertures are well known in the art. Clark teaches a felt cover (412) on an opening (426). It would have been an obvious design choice to one of ordinary skill in the art to provide felt cover on the opening (122) to the deflection duct (502) for the commonly understood benefit of protection from dust and other foreign materials.

Conclusion

The prior art made of record

- | | | |
|----|------------------|------------------|
| a. | US Patent Number | 6,002,949 |
| b. | US Patent Number | 6,134,336 |

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan C. Robinson whose telephone number is (571) 270-3956. The examiner can normally be reached on Monday through Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Suhan Ni, can be reached on (571) 272-7505. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2615

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan Robinson

/Suhan Ni/

Primary Examiner, Art Unit 2614